ABSTRACT

DNA primers effective in screening G protein coupled receptor protein-encoding DNA fragments are provided. The primers which are complementary to nucleotide sequences that are in community with (homologous to) the nucleotide sequences encoding amino acid sequences corresponding to or near the first membranespanning domain or the sixth membrane-spanning domain each of known various G protein coupled receptor proteins were designed and synthesized. Methods of amplifying G protein coupled receptor protein-encoding DNAs using the above DNA primers, and novel target G protein coupled receptor protein-encoding DNAs are also provided. Screening of DNA libraries can be efficiently carried out. Human pituitary gland or amygdaladerived and mouse pancreas-derived G protein coupled receptor proteins, etc. or salts thereof, partial peptides thereof, DNAs coding for the above G protein coupled receptor proteins, processes for producing the above G protein coupled receptor proteins, methods of determining ligands for the above G protein coupled receptor proteins, methods of screening compounds that inhibit the binding between the ligand and the G protein coupled receptor proteins or screening kits therefor, compounds or salts thereof obtained by the above screening method or the screening kit, pharmaceutical compositions containing the above compounds or salts thereof, and antibodies against the above protein coupled receptor proteins or partial peptides thereof are provided.

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